



MEMORANDUM

To: Karl Kilduff, Town of Darien Parking Committee

From: Tom Brown

Date: November 10, 2015

Subject: Technical Memorandum: Projected Conditions and Opportunities

EXPECTED DEVELOPMENT

Redevelopment of under-developed buildings and properties is expected to continue to reshape the Downtown over the next 10 years, and likely well beyond that. This growth is expected to reflect recent projects, which have increased the number of residential units located within Downtown, primarily built as multi-family apartment/condominiums located over ground-floor commercial uses. Recent and expected growth is a direct result of a zoning strategy that has successfully encouraged infill development within Downtown, and consolidated private parking areas into shared Municipal lots.

The first series of projects that took advantage of this strategy benefitted from the excess supply capacities that the Town was able to create through its consolidated, shared parking lots. As more infill development occurs, however, this original supply buffer is moderating, and is expected to become a supply deficit without some kind of supply/capacity expansion strategy in place. To get a sense of how imminently current surplus might become a deficit, and how significant that deficit might become over the next 10 years, the following section provides an overview of near-term projects and expected redevelopment activity in the Downtown.

PROJECTS EXPECTED WITHIN 5 YEARS

2 Squab Lane

This project was approved in 2006, but construction has been delayed since the economic downtown of 2007/08. Town staff, however, expect the project to be realized within the next year. It will be a retail and restaurant project, estimated to include:

- 11,592 overall square feet general floor area
- 5,796 square feet of retail uses
- 5,796 square feet of dining uses

The Baywater Properties Site

Among projects expected to be proposed in the next few years, the one that appears to be most imminent is a large, mixed-use, commercial, recreational and residential project for which several properties have been purchased in the triangular section bordered by I-95, Corbin Drive and Boston Post Road. The purchaser is Baywater Properties, a development corporation based in Darien. Outlines of the proposed development were presented publicly in July 2015, and included the following.

- Multiple, mixed-use buildings that would include businesses and residences.
- A proposed parking garage that would be underground and designed to blend with neighboring buildings.
- A “town green” public space sufficient to host outdoor events.

The scale of the project has not been outlined to date, but it is expected to include:

- Market-rate housing units;
- Office space;
- Restaurant space; and
- Retail uses.

FUTURE REDEVELOPMENT SITES (EXPECTED WITHIN 10 YEARS)

Several other sites are expected to be redeveloped over the next 5-10 years. Town staff have identified the most likely sites, as described below. No specific projects have been developed for these sites. So, for each, the developable footprint was used, along with the land use densities and mixes of recently developed and expected Downtown projects, to estimate future land use types and measures.

1044 Boston Post Road (gas and service station)

Expected to be a three-story, mixed use building.

- Developable footprint – 4,500 square feet, assuming donation of land sufficient to provide vehicular and pedestrian access into municipal Center Street South parking lot
- Likely number of residential units – Approximately 4
- Likely square feet of retail uses – Approximately 4,500
- Likely square feet of office uses – Approximately 4,500

19 Tokeneke Road (Darien News Store)

Expected to be a two-story, retail and office building, with a possible third floor for residences.

- Developable footprint – 1,980 square feet, assuming donation of land behind building for future expansion of Town municipal Center Street north lot
- Likely number residential units – Approximately 3
- Likely square feet of retail uses – Approximately 1,980
- Likely square feet of officer uses – Approximately 1,980

PROJECTED PARKING DEMAND

The current Town Zoning Regulations provide several options for satisfying minimum parking requirements. The first, and Town-preferred, option is to provide part of the development site to the Town for the development/expansion of shared parking in lieu of meeting minimum parking requirements. The three remaining options are to:

1. Provide shared/joint parking (Section 905);
2. Provide required parking (Section 904); or
3. Receive a variance from the Zoning Board of Appeals (more likely for additions to existing buildings than new construction).

Most Downtown developers opt for the first/preferred option, or to meet the minimum parking requirement via on-site, accessory parking. Either option involves a sacrifice of developable land area for the sake of parking. The first option, however, tends to sacrifice less land and allows for more development. The second option, results in less development, and less efficient parking configuration, but full control of the parking that is built.

Recent history suggests that, while some developers will be tempted to opt for the more conventional, full-control, option, most will opt for the Town-preferred option. This option saves on parking-construction costs, sacrifices less land and development opportunity for parking, and creates a more seamless parking environment, in which project tenants have better access to larger parking supplies. Recent outcomes of projects that have opted for the more conventional approach also suggest that the Town will, and should, make clear to future developers that the shared-parking option is strongly preferred for having much greater economic benefit for the overall Downtown.

The following assessment of parking demand expected from the projects outlined above, projects demand, based on both conventional projection methods and on Nelson\Nygaard's experience with aggregate parking demand in shared parking environments.

Conventional Projection Method

For Downtown Darien, conventional projections of parking demand from new land uses can be calculated by using current minimum parking requirements for the land uses expected at each project. This is a reasonable method for projecting supplies, if not demand, at projects built by developers who choose to provide their own parking, rather than dedicate land for Town parking.

Figure 1 Current Parking Requirement Ratios

Land Use Type	Requirement
Multi-family dwelling	2.5 spaces/dwelling unit
Office	1 space/250 sq. ft. of gross floor area
Medical Office	4 spaces/physician + 1 space/each employee
Retail/Commercial	1 space/150 sq. ft. of gross floor area

Restaurant

1 space/100 sq. ft. of gross floor area.

Shared-Parking Projection Method

Nelson\Nygaard has developed a Shared Parking Model for projecting parking demand generation from new land uses in mixed-use, urban settings. The model is based on our firm-wide experience in measuring and projecting parking demand in shared-parking environments, as well as our familiarity with similar peer work, and “industry standard” projection methodologies and models. This model matches land use inputs with parking-generation ratios, and uses the combination of uses to project peak levels of aggregate demand (from all uses combined, within a shared parking supply) during a typical week.

The following table identifies the demand-generation ratios used in our model, for the land uses identified above.

Figure 2 Shared Parking Model Demand-Generation Ratios

Land Use Type	Requirement
Multi-family dwelling	1 spaces/dwelling unit
Office	1 space/500 sq. ft. of gross floor area
Medical Office	1 space/250 sq. ft. of gross floor area
Retail, Commercial sales and services	1 space/333 sq. ft. of gross floor area
Restaurant (excluding patron bar area)	1 space/166 sq. ft. of gross floor area.
Outdoor seating/dining*	1 space/166 sq. ft. of gross floor area.
Patron bar area of restaurants taverns and cafes	1 space/166 sq. ft. of gross floor area

*Note that the first 16 seats of outdoor dining capacity are exempt from minimum-requirement calculations in the Town's Zoning Regulations.

The critical advantage of projecting aggregate demand peaks is that it more accurately predicts the demand/supply balance within a parking supply that is effectively shared. By contrast, minimum parking requirements generate supplies that are built based on cumulative peaks — the greatest number of cars expected at any one time for each land use, even if the timing of their peaks varies significantly.

For example, a new building with upper-floor residential uses and ground-floor retail, with a shared lot behind the building might only ever attract as many as 20 cars at one time. Providing a 10-15% supply buffer, the optimal supply for such a building may be approximately 22-24 spaces. If one takes the approach of a typical parking code, and bases supply-need projections on the accumulation of each land use's peak demand, the requirement would likely be much higher. The table below demonstrates this.

Figure 3 Aggregate vs. Cumulative Peak Measures in Hypothetical Project Scenario

Typical Peaks	Resident Cars	Non-Resident Cars	Aggregate Demand	Preferred Supply	Cumulative-Peak
Overnight	18	0	18	21	33 (18+15)
Midday	5	15	20	24	

As shown above, the cumulative-peak approach projects demand in the abstract, while the aggregate measure projects demand, framed in “real world” conditions. If each land use were expected to have its own, dedicated supply, the cumulative peak would be a reasonably accurate measure of supply needs. But in a shared parking environment, parking requirements based on this approach consistently result in over-supplies.

The difference between 24 spaces and 33 may seem minor. But, in the above scenario, with a supply of 24 spaces, and a likely average occupancy of perhaps 18 cars, six spaces would sit empty at most times. If supplied to meet the cumulative-peak measure, 15 spaces would sit empty at most times (and perhaps more, if a supply buffer is recommended in addition to the 33 spaces). This is the difference between a downtown with mostly full parking lots, and one with “half empty” lots creating a sense of decline. The impact on allowable densities is also substantial. And, if the lots are not designed very carefully, the impact on downtown walkability can be quite detrimental.

Combining downtown-appropriate demand-generation ratios, and a focus on measuring aggregate demand, the Shared Parking model, provides a more appropriate and accurate estimate of parking demand impacts likely to be generated by the new land uses expected to be developed in Downtown over the next 2, 5, and 10 years.

CLOSING FUTURE SUPPLY GAPS

Expected growth from retail uses will put increased pressure on existing short-term parking supplies. Expected residential and office growth will increase demand for Commuter and Downtown permits. To meet this expected increase in demand, the following is a comprehensive overview of strategies that can:

- Expand current supplies;
- Expand effective capacities of existing or future facilities; and
- Manage and/or reduce parking demand to make the most of existing/future supplies/capacities.

Note: where similar strategies have been recommended in previous studies, those recommendations are paraphrased within blue-shaded call-out boxes.

SUPPLY EXPANSION OPPORTUNITIES

On-Street

In any downtown, on-street parking tends to be the most sought after by visitors, and the most valued by local businesses. It is also one of the cheapest forms of parking to provide and maintain. Expanding the supply of such space, is generally limited to opportunities to re-assign curbside regulations. However, there appear to be a few blocks along Downtown streets along which parking could be added in support of expanded short-term parking opportunities.

The two examples given below are located along key retail streets that expand the Downtown visitor experience beyond Boston Post Road. In both cases, providing more on-street parking would also help reduce vehicle and vehicle-turning speeds, in support of safer more comfortable walking environments.

Tokeneke Road

The first few hundred or so feet of Tokeneke Road, off of Boston Post Road and opposite of the tracks, appear to offer ample room to convert the current No Parking Any Time regulations to short-term parking. This would directly benefit the several adjacent shops, and help signal that this block offers a solid extension of the commercial activity found along Boston Post Road. This would also help reduce pedestrian exposure to moving traffic as they cross Tokeneke Road, particularly if the added parking were to be combined with a curb extension to tighten the angle of right turns off of Boston Post Road.

Figure 4 Adding On-Street Parking on Tokeneke Could Help Businesses & Improve Pedestrian Safety



Image Source: Google Maps

The eastbound lane of Tokeneke Road is about 19' wide at this point. This provides plenty of room to add on-street parking. The rendering below depicts a redesign that would create 110' for curbside parking, a curb extension at the corner, and a pedestrian safety island for those crossing Tokeneke. The 110' of new parking should provide up to five new spaces to support adjacent retail uses, while the overall redesign helps improve one of the most problematic pedestrian crossing in the downtown.

Figure 5 More Parking and Safer Walking without any Changes to Boston Post Road



Note: Any physical changes to Tokeneke Road would require Connecticut DOT approval.

Grove Street

Figure 6 A Redesign Could Make Grove Street Feel More Like a Neighborhood Shopping Street

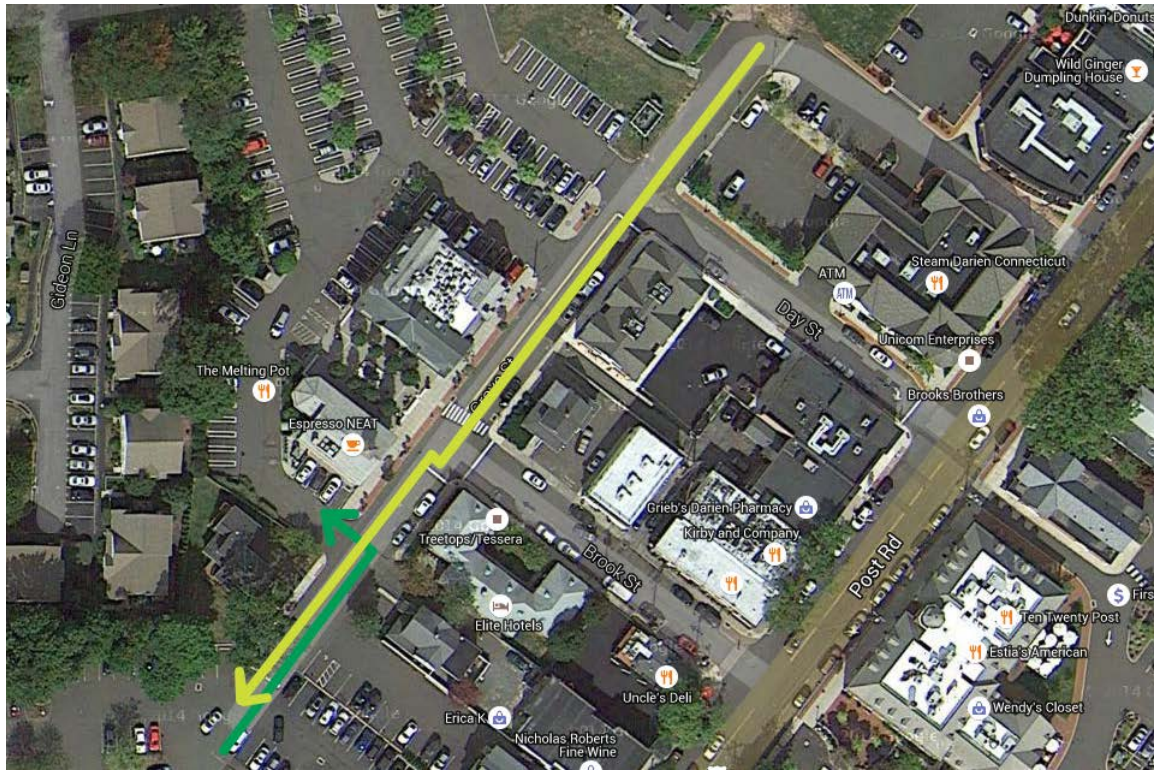


Grove Street is a short, three-block street that serves as a connector between several off-street lots and Boston Post Road. This road has recently, however, emerged as a burgeoning “second Main Street” for Downtown Darien, linking several new and established buildings that form a cluster of Downtown residences and a growing number of commercial storefronts. The likely moderate traffic volumes along this road should provide opportunity to re-explore lane widths and striping in order to make this street feel more pedestrian-friendly, and to shift some on-street parking to the side adjacent to the new retail uses.

The street is 30' wide, which doesn't really allow for parking on both sides *and* 2-way traffic. Nonetheless, there are options worth exploring that could help make this street feel more oriented to walking and the “park-once” commercial environment of downtown.

1. Create a two-way “yield street” by alternating parking on either side of the street, which creates a slower-speed environment by “jogging” the travel lanes and making street crossing feel shorter.
2. Convert most of the street to 1-way and add parking on both sides.
3. Stripe a 4' wide median with planters at the corners, creating 9' travel lanes and an 8' parking lane on one curbside. This would help slow traffic and provide pedestrian crossing refuges along this emerging retail street.
4. Add curb extensions at the corners. If nothing else is done, this would help shorten crossings to new retail destinations, as well as any new homes and offices, emphasizing the pedestrian-oriented, park-once environment in this emerging extension of downtown.

Figure 7 Making Most of Grove Street Would Allow More Parking, Create Better Pedestrian Conditions



Potential Off-Street Sites

From 2007 Parking Study

- The Commission in conjunction with the Board of Selectmen should explore opportunities for more public-private partnerships to take advantage of some of the underutilized private parking in and near the downtown in a manner that benefits all the stakeholder parties.

Leroy West Lot Site

The expansion of the Leroy West lot into a multistory parking facility was reviewed in recent years. Traffic and safety issues related to exiting sight lines, and the entry/exit traffic loads that would be generated by expanding this facility, were viewed as unacceptable.

Corbin Drive and Post Road Site

One significant advantage of development on this site would be remediating the perpendicular parking spaces located along Boston Post Road between Corbin Drive and the Bank of America building. These spaces are no longer code compliant, are restricted to customers of adjacent businesses, and create significant diversions and hazards for pedestrians walking along this stretch of Downtown's "Main Street". Development could also absorb several, small private lots into a much larger and more efficient, shared parking facility.

Zoning Strategy

From Action Plan for Revitalization of Downtown

- Eliminate or decrease regulatory barriers by developing less stringent parking regulations.

From 2007 Parking Study

- Support gradual shift by new development or redevelopment to greater reliance on the municipal parking supply
- Add options for meeting the parking requirements in the downtown
- Provide more, and clear, incentives for developers to meet Darien parking objectives.
- Reduce all parking requirements within this area.
- Include reductions for the creation of municipal spaces.
- Add maximum as well as minimum space requirements for parking.
- Allow a fee to be paid in-lieu of providing parking spaces.
- The fee per space would best be determined based on an analysis and advice of a parking financing expert.

From Route 1 Corridor Study

- Consider reducing mandated parking requirements.
- Consider adopting parking maximums.

There are four primary opportunities that can be created through a revised set of Downtown-specific parking requirements.

1. Ensuring that minimum parking requirements are not a barrier to the level of investment and types of projects desired for the area.
2. Discouraging private, “accessory” parking facilities, which can undermine efforts to promote walkable, transit-friendly land-use densities.
3. Encouraging shared parking provision at larger private developments, which will help promote infill development on smaller parcels.
4. Allowing developers to fund public parking or other forms of access infrastructure, in lieu of meeting parking demand/requirements on site.

A very basic approach to set a more appropriate schedule of parking standards for Downtown would:

- Allow all requirements to be met through an In Lieu Fee, or comparable alternative;
- Establish a maximum standard for non-shared parking, based on current minimum requirements, allowing parking to be provided above this standard only if all excess spaces are made available as a shared resource;
- Allow developers to pay a fee, similar to the In Lieu Fee, to provide excess parking that is not shared; and
- Identify complementary incentives for providing multimodal access amenities, such as bike parking, car-share access, sidewalk enhancements, and transit amenities.

This would address several issues and opportunities identified in the 2007 Parking Study, including the “lack of clarity” on parking requirements, expectations, and alternatives and the State-granted legal authority to establish an In Lieu Fee strategy.

Use Strategic In Lieu Fee Rate

To make In Lieu Fee strategies even more effective, the fee rate can be set at a sliding scale in order to encourage larger projects to develop on-site parking, while making the option affordable and attractive to developers of smaller sites.

This would make it feasible for smaller projects to be built with no on-site parking, preserving their full lot for higher-value uses and avoiding inefficient, sidewalk-disrupting driveways along Downtown streets. At the same time, the fee increments would make it less likely that larger projects that have a more suitable footprint for parking would waive all of their requirements.

The figure below shows how this might translate for projects of various sizes/ parking requirements, using a base fee of \$5,000, and a fee increment of \$1,000.

Figure 8 Sample Incremental Fee Table

# of Spaces	Per Space Fee @ \$5,000 + (\$1,000 X # of Spaces)	Total Fee
1	\$6,000	\$6,000
2	\$7,000	\$14,000
3	\$8,000	\$24,000
4	\$9,000	\$36,000
5	\$10,000	\$50,000

EFFECTIVE-CAPACITY OPPORTUNITIES

The following strategies can expand the “effective capacity” of existing parking supplies, either by making greater occupancy levels possible within individual facilities, by redistributing demand to increase use of facilities that tend to have excess capacity at peak-demand times, or simply by making existing parking options more readily apparent and appealing.

Maintain Consistent Short-Term Availability

From Action Plan for Revitalization of Downtown

- Increase the availability of on-street parking.

Manage for the Peaks, Focus on Prime Locations

Downtown parking studies consistently reveal a strong preference among all stakeholder groups for “convenience” in choosing where to park. Convenience is determined by destination, and the general concentration of destinations within downtown districts tends to lead to a small subset of available parking options being highly coveted by most drivers. This, in turn, can create a strong impression that “there is nowhere to park downtown”, even when plenty of less-convenient spaces sit empty.

On-street spaces along primary commercial streets are the most likely to generate exceptional levels of demand. Unless actively managed, these spaces will lack availability during high-demand periods. As a result, it is common to find these spaces actively regulated through pricing and/or limits on duration. The most commonly cited objective of this active management is “turnover” —

increasing the number of cars that can be accommodated by reducing average parking duration, and “turning over” the same spaces consistently throughout the day. A more precise objective, that many cities are starting to embrace, however, is “availability” — the presence of empty spaces at any given time.

Ideally, one or two spaces will remain empty/available, even during demand peaks, along all blocks. If this availability can be maintained, turnover and parking duration do not need to be actively managed. This is a significant advantage, as these measures are much more difficult to document and alter through management and regulation. By contrast, relative levels of availability can be measured through regular observation, and undesirable levels of availability can be addressed by adjusting pricing or time limits.

Expand Pricing as a Management Tool

Between the two primary tools for maintaining availability, pricing offers several distinct advantages over time limits.

1. Pricing is an intuitive and culturally-familiar mechanism for managing demand for a limited resource. By contrast, parking is one of the few realms of life in which time limits are a familiar regulatory mechanism.
2. Pricing is flexible. When parking duration is metered, rather than limited, drivers can adjust how much parking they consume to meet their specific needs. It could be 15 minutes one day, and three hours the next. By contrast, time limits must anticipate drivers’ schedules and needs, while also ensuring that area employees/merchants don’t abuse generous time limits to occupy these spaces all day.
3. Time limits are labor-intensive to enforce effectively, particularly so for time limits of one hour or less. Payment compliance, by contrast, is much simpler to monitor and enforce.

Additionally, what drivers tend to resent most about metered parking is not the cost, which is often quite modest compared to what is spent by a typical shopper/diner in a successful downtown. While no one prefers to pay for something that they could get for free, what really tends to rankle drivers more than what curbside meters charge them is 1) the fear of getting a ticket if their meter “runs out”, and 2) the inconvenience of the payment media. The first of these objections is an enforcement/ fine issue that can be addressed through best practices outlined below.

The second of these objections is typically linked to either the need to find enough quarters to buy enough time, or the need to deal with a multi-space meter that is either cumbersome itself, or requires returning to one’s vehicle to place a receipt on the dashboard. Both of these are avoided by the Pay by Plate meters that Darien has recently installed to support its daily parking lots. The convenience of these meters, which also greatly facilitate time limit enforcement, is further enhanced by the Pay by Phone option that the Town has also made available to daily parkers.

Make Use of New Technologies

Darien has recently invested in two forms of technology that provide powerful parking management tools: License Plate Reader (LPR) compliance-monitoring, handheld devices, which can make time-limit enforcement and pricing strategies much more effective, and Pay by Plate, multi-space payment kiosks + a Pay by Phone alternative, which could be used to pay for parking anywhere within the Darien parking system. Combined, these new tools provide opportunities to explore the following management opportunities.

Enforce time-limits system-wide

LPR-based enforcement can virtually eliminate the ability of employees to skirt time limits by moving their cars every two or three hours.

Provide a Daily Parking option in the Town's short-term lots

LPR-based enforcement + Pay by Plate/Phone meters make it possible to extend daily parking options to those using the Town's short-term parking lots. This provides a unique opportunity to introduce pricing-based management to all Town parking facilities, and allow visitors to pay for the convenience of not having to worry about over-staying time limits.

Provide flexible parking options for residents and employees

The Town could use the Pay by Plate system to combine a Town permit with a "bank" of days that can be used by residents and employees on days when more convenient parking locations are needed or highly valued. Without this bank of days, or once they have been used up, all drivers, including Downtown residents, employees, and business owners can choose to pay for parking convenience on days when this is most desired.

The impact of pricing will generally mean that this option is chosen only when most needed, reducing the impact from these groups, while still providing them with this option whenever they want it.

Explore Public Valet to Expand Short-Term Capacity

Unlike other valet programs that serve only one business, public valets are designed to serve business on a district scale. This allows the valet service to directly support Park Once objectives, allowing drivers to visit as many Downtown destinations as they desire, without having to find second and third parking spaces.

By dedicating just a few on-street spaces, used for dropoff and pickup, public valet can greatly expand the capacity of curbside capacities on high-demand blocks. For customers, these services offer an easy alternative to finding on-street parking, or dealing with off-street facilities, by allowing drivers to drop-off their car at a central location, shop, eat, catch a movie, run errands, etc. and not pick up their car until they are ready to go home.

Just as importantly, valet services can facilitate shared parking arrangements, by limiting access to the shared facility to an identifiable service that can assume responsibility for all risk. This can open up access to private parking lots that might otherwise remain significantly underutilized.

Explore Park-&-Ride Valet to Expand Daily Parking

Cities, including New Haven and Metropark, NJ are beginning to expand the effective capacity of constrained park-and-ride resources by providing valet service at commuter rail stations. The valet service at Metropark is offered at the same \$5 day rate for self-parking. Financially, it is a break-even operation, making it a sustainable strategy for expanding station-parking capacities and providing a high level of customer service. By making use of tandem parking options that do not work with self-parking operations, the valet service can accommodate approximately 120 extra cars per day.

A similar opportunity may be possible at Darien Train Station, using valet drop-off to extend "front-door" parking options beyond the capacity of the two on-site lots. The Leroy East lot might

be an ideal location to set aside for valet-only, tandem parking for such a service, expanding the effective-capacity of this lot, which is located near-enough to station entrance and exits to make valet feasible.

Another option would be to setup a valet service within the Leroy West, providing drop-off and pickup near the entrance, while using tandem parking to maximize the effective capacity of the back area of this lot, which tend to be underutilized.

The Town has informally investigated valet parking for this purpose, and some of the obstacles identified then remain challenges for a valet operation. Primarily, these are linked to the logistics of providing a valet service, including the cost of staffing such an operation. To be viable, a valet service would like have to be offered at a premium, relative to current self-parking rates.

REMOVE TIME LIMITS ON OLD KINGS HIGHWAY SOUTH

Parking along this block is limited to two hours, despite very low utilization.¹ Removing time limits will expand the effective on-street parking capacity for employees, downtown residents, and visitors planning to spend more than two or three hours in Downtown. Striping these spaces may also help make these parking opportunities clear to all drivers.

Figure 9 Parking is Allowed on Both Sides of Old Kings Hwy South but is Generally Unused



Image Source: Google Maps

EXPLORE WAYFINDING & INFORMATION OPPORTUNITIES

The term “wayfinding” was first used in 1960 by Kevin Lynch to refer to maps, street numbers, directional signs, and other elements as “way-finding” devices. Wayfinding can provide key support to Park Once efforts by helping visiting drivers find appropriate parking options, guiding them toward their primary destination once they are out of their cars, and continuing to promote walking access to other destinations while they remain in the area.

While commuters and residents quickly learn the location and regulations of available parking options, visitors tend to have a short window of opportunity before becoming frustrated by a lack of intuitive information, or guidance signage pointing them toward the right options. And,

¹ The Town recently improved the delineation of parking spaces along the north side to improve utilization of these spaces.

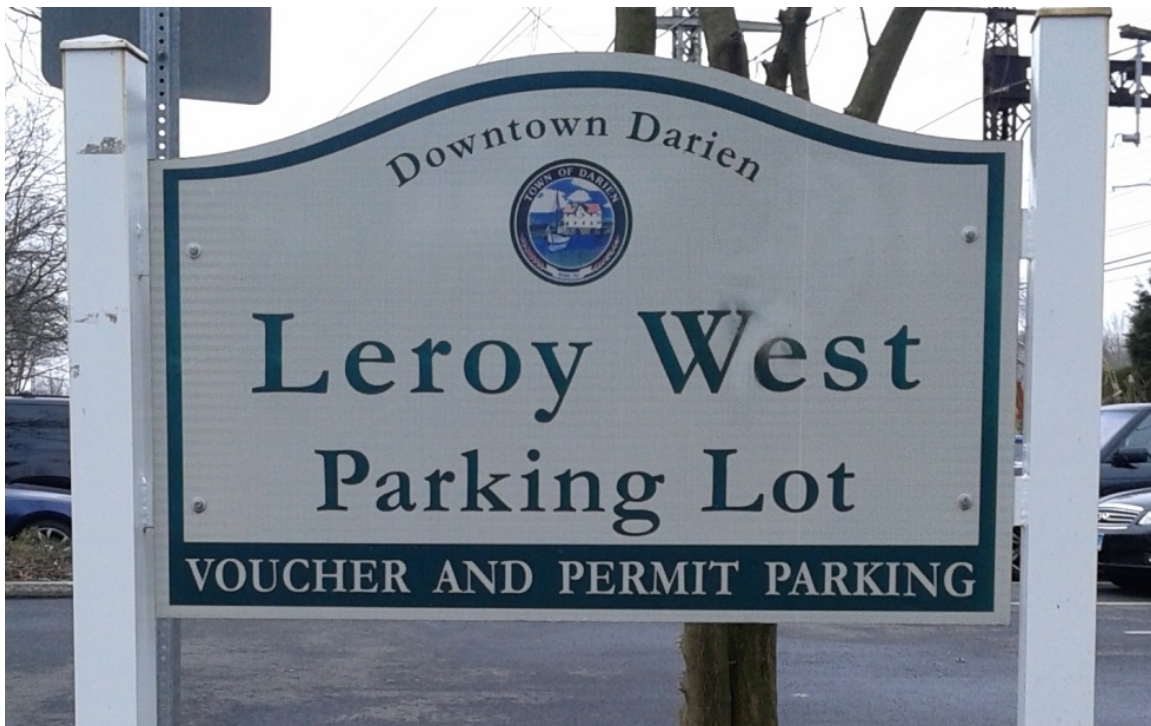
without clear information at each location, visiting drivers can become intimidated by the uncertainty and any perceived threat of citation or towing. For these reasons, the strategies below are primarily focused on opportunities to improve visitor parking experiences, particularly strategies that can make visitors aware of, and comfortable using, all parking options available to them.

Figure 10 Walk Raleigh Signage



Image Source: Walk Raleigh

Figure 11 Distinctive Branding Could Help Visitors Quickly Identify “Right Fit” Options



Branding Town Lots & Park Once

Branding Park Once opportunities is primarily a matter of creating consistency among all relevant parking facilities. This includes consistency of time limits, facility look and condition, and signage among all facilities primarily targeting visitor parking markets. Of particular importance for Darien will be branding that distinguishes Short-Term parking lots from Commuter Permit and Daily Parking lots. By increasing the awareness and confidence among visitors regarding their parking options, branding could be very effective in reducing excess search traffic and increasing utilization of parking facilities that might otherwise appear to be private or permit-only lots.

Figure 12 Branding Helps Visitors Find Affordable Off-Street Parking in Roanoke, VA



Image Source: Park Roanoke

Simplify the Regulatory Geography

The simplest most effective wayfinding strategy for directing drivers to their “right fit” parking solution is to simplify the geographic distribution of parking prices and restrictions. For Downtown Darien, this would mean varying as little as possible from something like the following.

- Boston Post Road – 1-hour parking
- Side streets (connecting to Boston Post Road)– 2-hour parking
- All other streets – No time limit
- Downtown lots – 2-hour parking, with 3-hour spaces clearly marked toward rear of lots
- All Commuter Permit lots – Permits before 10AM, daily parking after 10AM

Figure 13 1-Hour Spaces on Tokeneke add Complexity and are Under-Utilized

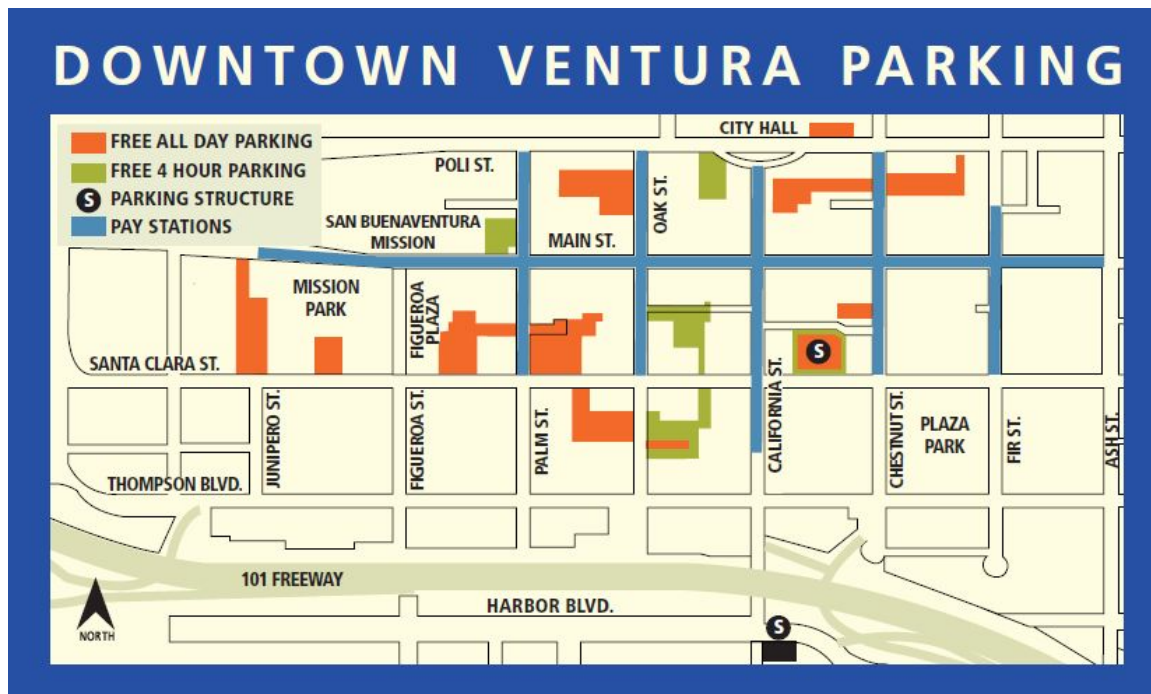


Create a Downtown Parking Map

This should include all streets that have on-street parking, and all lots that offer public parking, each marked according to time restrictions and any parking rates. This can also include facilities that only provide public parking during evenings and weekends, such as the Merrill Lynch building's lot. To promote cycling access to Downtown, the map should identify both routes into Downtown and locations of bike parking facilities.

Maps should be disseminated in print, web, and smart phone app forms.

Figure 14 Downtown Parking Map for Ventura, CA



From Route 1 Corridor Study

- Develop a Bicycle Facilities map for posting on the Town website that illustrates bike routes and locations of bicycle parking in Darien.

DEMAND REDUCTION OPPORTUNITIES

IMPROVE PEDESTRIAN, BIKE, & TRANSIT OPTIONS

Improve Pedestrian Crossings

From Action Plan for Revitalization of Downtown

- Construct safer crosswalks, curb extensions or bulb-outs.
- Implement traffic-calming measures.

From Route 1 Corridor Study

- Provide curb extensions, pedestrian crossing upgrades, and high-visibility un-signalized crossings to increase pedestrian safety and access
- Provide better pedestrian signals at all signalized intersections.

There are just four points within Downtown at which pedestrians can cross Boston Post Road within marked pedestrian crosswalks. None of these offer dedicated pedestrian signals. At many, it is even difficult or impossible to monitor the traffic signal to gauge when to enter the crosswalk. Several studies have identified the issues and barriers created by these conditions.

From the perspective of the Parking Study, addressing these barriers would directly support Park Once objectives via better, safer, more useful pedestrian connections between parking and Downtown destinations. Boston Post Road crossing conditions, in particular, have been noted to cause many patrons to drive between Downtown destinations, simply to avoid having to cross the street.

While the state-highway designation limits the level and types of traffic-calming that can be implemented on this street, several improvements should nonetheless be possible.

- Pedestrian signals
- Curb extensions where on-street parking has already absorbed travel-lane capacity
- Crosswalks at all legs of each intersection

These changes should be acceptable to Connecticut DOT engineers, who would have to formally approve them.

Expand Bike Parking

From Route 1 Corridor Study

- Install bike racks at community facilities, in the Central Business District, and at Darien Station.
- Develop new, short-term, bike-parking facilities at: Town Hall, the police department, the post office, Mather Fields, on Route 1 near Corbin Dr and near Center St., behind the movie theater, adjacent to municipal parking lots

From Action Plan for Revitalization of Downtown

- Provide bike racks, and identify routes to connect to outlying neighborhoods.

A single vehicle parking space can accommodate eight or more parked bikes within an on-street, bike “corral”. Businesses in bike-friendly communities are increasingly recognizing the value of increasing person access to their doors by lobbying city DOTs to convert one or more conventional, short-term parking spaces to bike corrals that accommodate eight+ customers. In some cities, this has proved easier to implement than performance-based pricing, making the capacity gain that much more valuable in high-demand, under-priced areas.

Add Bus Stop Amenities

From Action Plan for Revitalization of Downtown

- Provide well-appointed bus or transit stops with shelters and good signage

From Route 1 Corridor Study

- Add transit-stop amenities to enhance the user experience and encourage more transit use for downtown trips.

Bus stops that offer optimal shelters and essential system information can effectively raise public awareness of, and potentially interest in, existing transit options. Conversely, bus stops with minimal amenities give a clear impression that connecting bus services are not widely used, and thus likely not very effective for common travel needs. Specific amenities recommended in the Route 1 Corridor Study include the following.

- Sheltered waiting areas with seating and lighting
- Route and connecting service information
- Bike and moped parking
- Waste baskets
- Information Kiosks
- Landscaping, artwork, and other aesthetic enhancements

REDUCE RAIL COMMUTER PARKING DEMAND

Permit and Daily Rates

From the 2013 SWRPA Rail Station Parking Study Update.

- Increase the daily parking rate from \$3 to \$5 or higher.
- Increase permit prices by 10% each year.

The current annual permit and daily parking rates at Darien's rail commuter lots are below regional averages. Maintaining rates below regional averages artificially inflates parking demand among the Town's limited parking resources, and creates excess parking traffic during peak congestion periods. Increasing both the permit and daily rates to be in line with comparable peer rates should therefore be expected to reduce demand at Town lots. Another valid option is charging a premium rate for clearly preferred locations, such as the two Daily Parking lots that abut the train station.

REDUCE RESIDENT PARKING DEMAND

Car Sharing

Ready access to car-share vehicles reduces car ownership among residents, by both attracting one-car and carless households and making it viable for others to reduce car ownership to these levels. A UC Berkeley study of San Francisco's City CarShare found that when people joined the car-sharing organization, nearly 30% reduced their household vehicle ownership and two-thirds avoided purchasing another car.² Studies show that each car-sharing vehicle takes between 5 and 15 private cars off the road.

Furthermore, research indicates that car-sharing members drive 44% less than they would if using their own car, primarily because a modest cost is directly associated with each trip made.³ This can translate to more active neighborhoods, as driving trips to "big box" stores are replaced by walking trips to nearby shops and services. From an economic-development perspective, shared vehicles are an attractive amenity for both residential and commercial customers. By adding an additional transportation option, car-sharing can provide urban properties with increased accessibility, helping to offset the complexities and costs associated with parking private vehicles.⁴

² Robert Cervero and Yu-Hsin Tsai (2003), *San Francisco City CarShare: Travel-Demand Trends and Second-Year Impacts*, Institute of Urban and Regional Development,

<http://repositories.cdlib.org/cgi/viewcontent.cgi?article=1026&context=iurd>

³ Shaheen, Susan A., Cohen, Adam, and Martin, Elliot (2010), "Car-sharing Parking Policy: A Review of North American Practices and San Francisco Bay Area Case Study," *Transportation Research Record*. March 15, 2010.

⁴ Cohen, Adam P., Shaheen, Susan A., and McKenzie, Ryan. "Car-sharing: A Guide for Local Planners," (2008), Institute of Transportation Studies, University of California, Davis, Research Report UCD-ITS-RP-08-16.

Bike Parking

From Route 1 Corridor Study

- Adopt bicycle parking requirements into the Zoning Regulations to provide short and long term bicycle parking for new developments.

Develop incentives for developers to include state-of-the-practice bike parking facilities at their projects, particularly in complement to new dwelling units. Attracting new households that value bike parking is likely to reduce average car-ownership rates among these new Downtown residents. Promoting a local bike-mobility culture will also help promote the viability of cycling for accessing Darien destinations outside the downtown core. This can, in turn, help generate interest in cycling to Downtown among Darien residents who would otherwise drive.

REDUCE EMPLOYEE PARKING DEMAND

From the 2013 SWRPA Rail Station Parking Study Update.

- Embrace TDM policies/programs to better manage parking resources through reduced demand.

Develop Bus Pass Program

The robust and expanding population of Downtown service and retail employees represents a promising market for increased bus-transit commuting.

Develop a Partnership with CT Rides

CT Rides is a public resource, provided by CT DOT, to facilitate commuter mobility in Connecticut. CT Rides helps commuters assess their commute options from among a variety of alternative modes including ridesharing, transit, biking/walking and teleworking solutions. To incentivize commuters to try these options, CT Rides offers a reward program, trial ride passes, cost calculator, trip planning software, and guaranteed ride home.

CT Rides services are available directly to commuters or under an employer's account. Employers will find basic information on the benefits of supporting commute alternatives, including improved employee productivity, easier recruitment and retention, reduced absenteeism and late arrivals, improved morale and reduced parking and office space needs and costs. In addition, they get guidance on commuter tax benefits and relocation services. CT Rides offers advice to employers for free if they call the customer service phone number.

The Darien Parking Committee should directly lobby Downtown employers to engage this service, and arrange informational sessions/events for Downtown employees.